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(71)Applicant : NIPPON STEEL CORP  
MITSUBISHI ELECTRIC CORP

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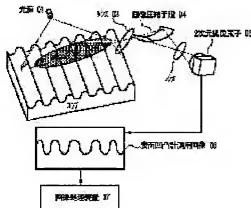
(72)Inventor : YAMAMOTO KAZUO  
HATANO TOSHIKAZU  
UEKI KATSUYA  
TAKASHIMA KAZUO

## (54) INSPECTION METHOD FOR QUALITY OF SURFACE

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an inspection method in which the number of components such as imaging elements or the like can be reduced by a method wherein a rectangular image having a large aspect ratio on a material to be inspected is formed on a two-dimensional imaging element which is a square shape of a rectangular shape having a small aspect ratio.

**SOLUTION:** The surface of a slab as a material to be inspected is irradiated with slit light from a light source 01, and its reflected light is condensed by a lens 03. After it has been condensed, it is condensed on a two-dimensional imaging element 05 at an imaging means via an image compression means 04 using a convex mirror. At this time, an image which is radiated on the output side of the means 04 becomes an image in which the image of the slab has been compressed in the width direction so as to be a distorted shape, and the image is formed on the element 05. Consequently, the image which is transversely long in the width direction of the slab can be formed on the element 05 which is a square shape of a rectangular shape having a small aspect ratio. An image 06, for measurement of a slab surface shape, which has been obtained is analyzed by an image processor 07, and the shape on the surface of the material



to be inspected is measured. Thereby, the number of imaging elements can be reduced, the maintainability of an apparatus is enhanced, and the inspection time of an inspection method can be shortened.

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#### LEGAL STATUS

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